



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# SCIENCE

FRIDAY, FEBRUARY 4, 1910

## CONTENTS

<i>The American Chemical Society:—</i>	
<i>Some Chemistry of Light:</i> DR. W. R. WHITNEY .....	161
<i>The American Association for the Advancement of Science:—</i>	
<i>Racial Differences in Mental Traits:</i> PROFESSOR R. S. WOODWORTH .....	171
<i>Scientific Notes and News</i> .....	186
<i>University and Educational News</i> .....	189
<i>Discussion and Correspondence:—</i>	
<i>The Green Bug and its Natural Enemies:</i> S. J. HUNTER. <i>Gametogenesis of the Saw-fly Nematus Ribesii:</i> LEONARD DONCASTER. <i>Mountain and Valley Winds in the Canadian Selkirks:</i> B. M. VARNEY .....	190
<i>Scientific Books:—</i>	
<i>Kahlenberg's Outlines of Chemistry:</i> PROFESSOR GILBERT N. LEWIS. <i>Investigations of Muscid Larvæ Entoparasitic on Arthropods:</i> C. H. T. TOWNSEND. <i>The Autobiography of Sir Henry Morton Stanley:</i> PROFESSOR WILLIAM LIBBEY .....	193
<i>Progress of Paleontological Research by the Carnegie Institute</i> .....	197
<i>Optically Active Substances containing no Asymmetric Atom:</i> PROFESSOR J. BISHOP TINGLE .....	198
<i>Incomes of College Graduates Ten Years after Graduation:</i> HERBERT ADOLPHUS MILLER ..	199
<i>Societies and Academies:—</i>	
<i>The Microscopical Society of Illinois:</i> ALBERT MCCALLA .....	200

MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

## SOME CHEMISTRY OF LIGHT<sup>1</sup>

FROM the dawn of history, chemistry has had much to do with the production of artificial light, and I wish now to recall to your minds a few illustrations. I will not burden your ears with a long story on physics or mechanics of light, but intend treating the subject of artificial light so as to show you that it has always been largely a subject for chemical investigation. I want to impress upon your minds that it is still a most green and fertile field for the chemist. I have tried to arrange a few familiar experiments to illustrate some of the facts touched upon, and it should be borne in mind that I am trying to interest an audience of chemists from widely different fields, rather than to present a chronological record of recent experimental research.

I can not tell just when chemistry was first scientifically applied to a study of artificial light. Most cardinal discoveries are made by accident and observation. The first artificial light was not made by design nor was the first improvement the result of chemical analysis. It is supposed that the first lamps were made from the skulls of animals, in which oil was burned. Herodotus, describing events about three centuries before Christ, says of the Egyptians:

At the times when they gather together at the city of Sais for their sacrifices, on a certain night they all kindle lamps many in number in the open air round about the houses: now the lamps are saucers full of salt and oil mixed and the wick

<sup>1</sup>Presidential address delivered at the Boston meeting of the American Chemical Society, December 29, 1909.